

I claim:

1. A multiplier circuit with offset compensation, comprising:

an analog multiplier including a first signal input for receiving a first signal, a second signal input for receiving a second signal, and an output for providing a multiplied signal.

a first switching device for polarity reversal, said first switching device connected to said first signal input; and

a second switching device for polarity reversal, said second switching device connected to said second signal input.

2. The multiplier circuit according to claim 1, wherein:

said first switching device includes a first clock input for receiving a clock signal;

and said second switching device includes a second clock input for receiving a clock signal; and

a clock signal having a changeover frequency is fed to said first clock input and said second clock input.

3. The multiplier circuit according to claim 2, wherein:

the first signal has a frequency and the second signal has a frequency; and

said changeover frequency is not less than two times a frequency selected from the group consisting of the frequency of the first signal and the frequency of the second signal.

4. The multiplier circuit according to claim 3, wherein the changeover frequency lies in a range between 4 times and 32 times the largest frequency.

5. The multiplier circuit according to claim 1, wherein the multiplied signal is a voltage that represents a product of the first signal and the second signal.

6. The multiplier circuit according to claim 1, wherein:

the first signal is a differential signal and the second signal is a differential signal;

said first signal input includes two terminals for receiving the first signal; and

said second signal input includes two terminals for receiving the second signal.

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7. The multiplier circuit according to claim 6, wherein:

said first switching device includes a device for polarity reversal for reversing a polarity of the first input signal that is received by said two terminals of said first signal input; and

said second switching device includes a device for polarity reversal for reversing a polarity of the second input signal that is received by said two terminals of said second signal input.

8. A quadricorrelator, comprising:

a first signal path;

a second signal path;

a first analog multiplier located in said first signal path, said first analog multiplier including an output and two inputs;

a second analog multiplier located in said second signal path, said second analog multiplier including an output and two inputs;

a differential node connected to said output of said first analog multiplier and to said output of said second analog multiplier;

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a first switching device for periodically reversing a polarity of a signal selected from the group consisting of a quadrature component of a signal and a signal derived from the quadrature component of the signal and for thereby providing a first quadrature component signal, said first switching device connected to said two inputs of said first analog multiplier for supplying the first quadrature component signal thereto; and

a second switching device for periodically reversing a polarity of a signal selected from the group consisting of another quadrature component of the signal and a signal derived from the other quadrature component of the signal and for thereby providing a second quadrature component signal, said second switching device connected to said two inputs of said second analog multiplier for supplying the second quadrature component signal thereto.